

REMARKS/ARGUMENTS

Favorable reconsideration of this application, in light of the present amendments and following discussion, is respectfully requested.

Claims 29-57 are pending. Claims 1-28 were canceled previously. Claims 46-55 are withdrawn. Claim 57 is added by the present amendment. Support for the amendment to Claim 57 can be found in Figs. 3-7, for example. Claims 29, 30, 36-39, 42 and 56 are amended. Support for the amendments to Claims 29, 30, 36-39, and 42 is self-evident. No new matter is added.

In the outstanding Office Action, it was indicated that Claims 29-45 and 56 are drawn to a method and are considered by the Examiner to be one group constituting an invention distinct from a second group. Claims 46-55 were indicated as constituting the second group. Applicants elect Group I, listing Claims 29-45 and 56-57 as readable thereon.

The outstanding Office Action rejected Claims 29-32, 36, 38, and 42 under 35 U.S.C. § 102(b) as anticipated by Nedelec et al. (U.S. Patent No. 4,292,065, herein "Nedelec"). Claim 56 was rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Nedelec. Claims 33-35, 37, 39, and 44 were rejected under 35 U.S.C. § 103(a) as obvious over Nedelec. Claim 40 was rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Gulotta (U.S. Patent No. 3,409,422, herein "Gulotta"). Claims 41 and 43 were rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Johnson (U.S. Patent No. 4,139,359, herein "Johnson '359"). Claim 45 was rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Johnson (U.S. Patent No. 4,123,246, herein "Johnson '246").

Regarding the rejection of Claims 29-32, 36, 38, and 42 as obvious over Nedelec, that rejection is respectfully traversed by the present response.

Amended independent Claim 29 recites, in part:

bringing glass sheets to their softening temperature, then moving the glass sheets over a shaping bed of advancing elements for advancing the glass sheets which are arranged along a path having a circular arc-shaped profile;

...

wherein the shaping bed has a profile extending in a circular arc of more than 90° and wherein, on leaving the shaping bed, the hardened glass sheets are moved in a direction opposite that in which they were fed into the bed.

Accordingly, the method includes moving the glass sheets over a shaping bed of advancing elements. The shaping bed extends in a circular arc-shaped profile of more than 90°.

The method recited in Claim 29 permits higher rates of travel of the sheets together with better quality than conventional methods as explained on page 2, lines 3-35 of the specification.

The outstanding Office Action cites Nedelec, col. 7, lines 21-27 as evidence that Nedelec discloses the above-noted feature. However, the cited section of Nedelec states:

As another possibility, **the leaf springs could be extended** to form a complete half-circle equipped with rods and counter rods for transporting the glass sheet past air-blowing manifolds the delivering them to a horizontal conveyor with an adjustable access ramp located under the infeed of the bending and tempering machine.¹

Thus, it is the leaf springs that can be extended to form a half-circle, not a shaping bed of advancing elements as recited in independent Claim 29.

It is clear that the extension in Nedelec occurs after the shaping bed because this system is mentioned as being one of the alternatives for removing the glass sheets at the discharge of the tempering section (see col. 7 lines 9-11), i.e. after the tempering section. Thus, Nedelec does not suggest that the **shaping bed** could be extended in a circular arc of more than 90°.

¹ Nedelec, col. 7, lines 21-27 (emphasis added).

Regarding the rejection of Claim 40 as obvious over Nedelec in view of Gulotta, the outstanding Office Action relies on Gulotta for the feature of forming compound bends at a temperature of 1200°F. Gulotta describes a generally linear or gently curved path for its sheets, not a shaping bed with an arc of more than 90°. Thus, Gulotta does not remedy the deficiencies discussed above regarding Nedelec in relation to independent Claim 29.

Regarding the rejection of Claims 41 and 43 as obvious over Nedelec in view of Johnson '359, that rejection is respectfully traversed by the present response. Johnson '359 describes a generally linear shaping bed and does not suggest a shaping bed with an arc of more than 90°. Therefore, no reasonable combination of Nedelec and Johnson '359 would include all the features of independent Claim 29 or any of the claims depending therefrom.

Regarding the rejection of Claim 45 as obvious over Nedelec in view of Johnson '246, that rejection is respectfully traversed by the present response. As shown in Fig. 1, Johnson '246 describes a generally linear shaping bed and thus does not remedy the deficiencies discussed above regarding Nedelec in relation to Claim 29.

Accordingly, as none of Nedelec, Gulotta, Johnson '359, and Johnson '246, suggests the shaping bed with an arc of more than 90° recited in independent Claim 29, no proper combination of the cited references would include all the features of independent Claim 29 or any of the claims depending therefrom.

Applicants wish to make the following additional remarks regarding dependent Claim 34, which recites:

The method as claimed in claim 29, wherein a hardened glass sheet is overturned by causing it, on its release, to be projected under the effect of its speed so that it strikes, by way of its front lower end edge, against an upper part of an idle roller whose axis is parallel to that of the advancing elements of the shaping bed, the hardened glass sheet then tilting about a line of contact with the idle roller under the effect of its weight to drop onto the conveyor belt in the overturned state.

Thus, the sheet is overturned by causing it, upon release from the shaping bed, to be projected against an upper part of an idle roller.

As discussed above, none of the cited references overturn the sheet as it is released from a shaping bed. Accordingly, none of the cited references overturn the sheet in the specific manner recited in dependent Claim 34. Accordingly, dependent Claim 34 further patentably distinguishes over any proper combination of the cited references for at least the additional reasons discussed above.

Applicants wish to make the following additional remarks regarding newly added dependent Claim 57, which recites:

wherein each hardened glass sheet is overturned, relative to a position occupied by the hardened glass sheet as it contacts a last of the backing rollers, upon release from a last roller/backing roller pair associated with the shaping bed.

Accordingly, each hardened glass sheet is overturned upon being released from the last roller/backing roller pair of the shaping bed. The sheet is overturned **relative to a position occupied by the hardened glass sheet as it contacts a last of the backing rollers**. In other words, the sheet overturns from one position to another just as the sheet leaves the shaping bed.

One non-limiting example of the above-noted process is described in Figs. 3-7 where the sheet (1) is flipped by coming into contact with the roller (14). As is evident in comparison between Figs. 3 and 7, the sheet (1) is overturned in Fig. 7 relative to its position in Fig. 3.

In contrast, Nedelec does not overturn a glass sheet as the glass sheet leaves a rolling bed. Rather, Nedelec does not show a sheet leaving the leaf springs (6), which the outstanding Office Action relies on for the feature of a curved roller bed.² Applicants respectfully submit that, even if the leaf springs (6) were extended to form a full half-circle as

² Outstanding Office Action, page 6.

discussed in col. 7 of Nedelec, nothing in Nedelec suggests that the sheets would then also be flipped just as they leave the leaf springs (6). Rather, Nedelec does not describe in detail the process occurring after the sheets leave the leaf springs (6), and there is no evidence that the sheets would be overturned from one position to another just as they leave the leaf springs (6). Accordingly, Applicants respectfully submit that newly added dependent Claim 33 patentably distinguishes over Nedelec for at least the reasons discussed above.

The outstanding Office Action relies on Gulotta for the feature of forming compound bends at a temperature of 1200°F. However, Gulotta fails to remedy the deficiencies discussed above regarding Nedelec with respect to dependent Claim 57. Rather, as shown in Fig. 1, Gulotta transfers sheets along a generally continuous arc and does not cause the sheets to overturn just as they leave a shaping bed as recited in Claim 57. Accordingly, no reasonable combination of Nedelec and Gulotta would include all of the features recited in Claim 57.

Johnson '359 is relied on in the outstanding Office Action for the feature of quenching by air. However, Johnson '359 transfers its sheets along a generally linear bending path and does not overturn its sheets when the sheets leave a curved shaping bed as recited in dependent Claim 57. Accordingly, no proper combination of Nedelec and Johnson '359 would include all of the features recited in Claim 57.

Johnson '246, like Johnson '359, transfers its sheets along a generally linear path with only a gentle curve and does not flip its sheets in any manner, much less flip the sheets as they leave a curved shaping bed as recited in dependent Claim 57. Thus, no proper combination of Nedelec and Johnson '246 would include all of the features recited in Claim 57.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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